

## ANNEX No. 2

### Additional Information on LOCAL SKILLS IMPROVEMENT FUND (LSIF)

Though the report highlighted the work of Marches Education Partnership and the Local Skills Improvement Fund (LSIF), this prospectus and detail will support the reader to understand the full offer being presented. The Local Skills Improvement Fund (LSIF) was granted to a collective of six training institutions across the Marches area in October 2023, after they made a successful bid to Government. Funding to allow them to offer new facilities, courses and equipment in skills areas articulated by employers to have severe shortages. Shortages highlighted by Shropshire Chamber of Commerce's extensive research, carried out directly with a wide range of employers across the Marches area and the subsequent publication of Shropshire Chamber's Marches Local Skills Improvement Plan (LSIP) Report, which was signed off by the Secretary of State in August 2023.

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Marches Education Partnership Prospectus

#### Useful Links

<https://marches-education.co.uk/>



Press Release: April 2024

## **Marches Education Partnership website launched.**

Today sees the launch of the Marches Education Partnership website <https://marches-education.co.uk/>. Education organisations across the Marches have secured a £2.5 million funding package to boost skills training in the manufacturing, engineering and construction sectors – with a particular focus on ‘green’ technologies.

It will see new training centres opened and new courses delivered across Telford & Wrekin, Shropshire and Herefordshire, under the Marches Education Partnership banner.

The project involves Herefordshire, Ludlow and North Shropshire College, Herefordshire and Worcestershire Group Training Association, In-Comm Training Services Ltd, SBC Training, Shrewsbury Colleges Group, and Telford College – supported by Telford & Wrekin Council and Shropshire Chamber of Commerce.

The funding from the Government’s Local Skills Improvement Fund (LSIF) addresses specific skills needs identified in the latest Local Skills Improvement Plan (LSIP) compiled by Shropshire Chamber on behalf of the Department for Education.

It will see the launch of 14 new training centres and the creation of at least 30 new courses to meet what the partners describe as some of the region’s ‘most significant sectors’, working closely with local employers.

The investment will address staff and skills shortages in the manufacturing and engineering sectors, including food and drink and construction, and build a ‘green skills’ construction workforce with a focus on environmental technologies.

The aim is to ensure that people seeking careers in growing sectors such as green energy, digital and construction – or looking to upskill for career development – can access improved skills training, helping them secure good jobs closer to home.

The projects are due to be delivered before the end of 2025. Around £1.2 million will be spent on new equipment and technology, with the remainder contributing towards curriculum development, staff development, promotion, and project management costs.

Education secretary Gillian Keegan said: “This investment is about boosting local industries, building people’s skills and ultimately futureproofing our economy and the career prospects of the next generation.”

End

## ANNEX No. 2

### MARCHES EDUCATION PARTNERSHIP PROSPECTUS

THE **MARCHES**   
**EDUCATION** PARTNERSHIP

Detail provided by the Institution.

# The LSIP Employer Training Prospectus



THE MARCHES   
EDUCATION PARTNERSHIP

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A man and a woman wearing hard hats and safety vests are walking on a solar farm. The man is holding a tablet and the woman is holding a clipboard. They are both looking at their respective devices. In the background, there are rows of solar panels and wind turbines under a clear sky.

Find out more:  
[marches-education.co.uk](https://marches-education.co.uk)

# Introduction

**The Marches Education Partnership has secured £2.5 million to boost skills training in the manufacturing, engineering and construction sectors – with a particular focus on ‘green’ technologies.**

It will see the launch of 14 new training centres and the creation of at least 30 new courses across Herefordshire, Shropshire and Telford & Wrekin.

The project will address staff and skills shortages in the manufacturing and engineering sectors, including food and drink and construction, and build a ‘green skills’ construction workforce with a focus on environmental technologies.

The aim is to ensure that people seeking careers in growing sectors such as green energy, digital and construction – or looking to upskill for career development – can access improved skills training, helping them secure good jobs closer to home.

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Herefordshire and Worcestershire Group Training Association (HWGTA) is an employer led, not for profit training provider offering bespoke apprenticeships and training to local businesses and communities. HWGTA has over 50 years of experience in delivering excellent training across the two counties, consistently rating above the national average for learner success rates, holding "Outstanding" grading from Ofsted and maintaining successful, long-term relationships with local employers.

HWGTA is unique in its employer led approach; with local business leaders heading up the voluntary board of directors, the training model adapts and continuously improves to fit the needs of local businesses. HWGTA manage the recruitment of apprentices, matching them with local employers and qualifications relevant to their industry and job role. Training is delivered via blended learning methods and tailored to the needs of the Employer, coupled with a dedicated monitoring officer assigned to each learner to support them on their apprenticeship journey in the workplace. Engineering Apprentices spend their first year in the fully equipped training centres, learning an array of skills which they take into the workplace during the remainder of their apprenticeship.

HWGTA are excited to open a new Automation training facility in our Hereford centre and be able to offer the latest automation training both as part of our apprenticeship provision and as short courses as shown in this prospectus.





## Contact Details

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[hwgta.org](http://hwgta.org)

# Introduction to PLC

Duration 3 Days

## About the course

This course provides an introduction to Programmable Logic Controllers (PLC's) and how they are used in various manufacturing and automation environments. Working with the latest Siemens Logo and S7 equipment in our new Automation facility, delegates will get a hands-on experience of programming PLC's in various real-life scenario's.

The course will identify different types of PLC's and their structure and applications, understand how PLC's work, cover programming and controls, look at input/outputs and provide an introduction to fault finding

## What you could do next

Engineers looking to further enhance their automation skills can undertake the Level 4 Advanced PLC course to increase your knowledge and skills, or the Level 3 Introduction to Robotics course to discover how PLC and Robotics can work together.





## Key Points

HWGTA is foremost in providing bespoke training for workplace competence and qualifications across Herefordshire, Worcestershire and further afield, working in partnership with individual organisations to identify their training requirements both to develop existing employees and to recruit and train new personnel.

# Advanced PLC

Duration 3 Days

## About the course

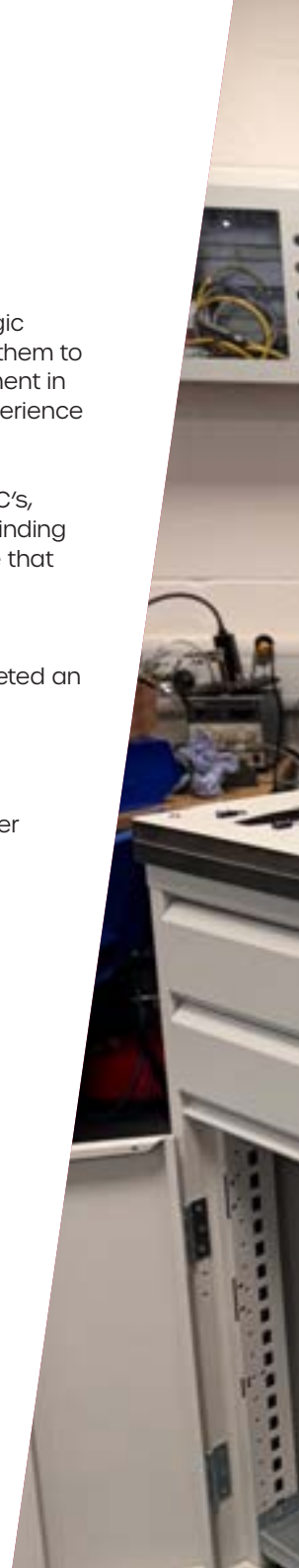
This course will take delegates familiar with Programmable Logic Controllers (PLC's) and expand on their knowledge to prepare them to an advanced level. Working with the latest Siemens S7 equipment in our new Automation facility, delegates will get a hands-on experience of programming PLC's in various real-life scenario's.

This advanced course looks at designing HMI's, networking PLC's, creating automated sequence programs and improving fault finding capability. The course is designed to be a practical experience that allows delegates to link the learning to the workplace.

This course is an ideal progression for delegates that have completed the Introduction to PLC course, or previously completed an engineering apprenticeship.

## What you could do next

Develop your knowledge further by undertaking a manufacturer specific PLC training course, or level 3 Introduction to Robotics course to discover how PLC and Robotics can work together.







## Key Points

HWGTA is foremost in providing bespoke training for workplace competence and qualifications across Herefordshire, Worcestershire and further afield, working in partnership with individual organisations to identify their training requirements both to develop existing employees and to recruit and train new personnel.

# Introduction to Robotics

Duration 3 Days

## About the course

This course will provide an introduction to the world of robotics and how they are used in various manufacturing environments. Using a combination of simulation and programming software and working with our Universal Robots Collaborative Robot delegates will get a hands-on experience.

Delegates will begin with an understanding of the safety principles and capabilities of robots, moving on to develop understanding of the software, hardware, setup and look at how robots link with other equipment such as conveyors through the use of inputs and outputs of measurement devices and controls.

The course requires a prior knowledge of electrical, pneumatics and PLC.

## What you could do next

Engineers looking to further enhance their robotic skills can undertake a Programming of Robots or Industrial Robot course. Level 3 or 4 PLC courses will enhance the link between Robotics and automation in manufacturing.





## Key Points

HWGTA is foremost in providing bespoke training for workplace competence and qualifications across Herefordshire, Worcestershire and further afield, working in partnership with individual organisations to identify their training requirements both to develop existing employees and to recruit and train new personnel.





## Herefordshire, Ludlow & North Shropshire College

Herefordshire, Ludlow and North Shropshire College group is made up of five colleges covering Herefordshire and Shropshire.

We work together to boost skills and improve knowledge right across the region, contributing to increased economic prosperity, innovation and inspiration.

From A Levels to apprenticeships, vocational courses to higher education – there's something for everyone.

Our five colleges boast excellent, modern facilities including specialist workshops, our new Low Carbon Technology Training Centre, professional training restaurants, salons, science labs, equestrian centres, domestic and exotic animals and more. There's been recent investment and renovation across all campuses.

You will be given the opportunity to excel and succeed in your learning by our well-qualified and highly professional tutors.

The vast majority of our students progress to higher level courses, including university studies, and then into employment.

The College is rated 'good' by Ofsted, with our students' attitudes and behaviours 'outstanding'.





# Contact Details

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[hlhsc.ac.uk](http://hlhsc.ac.uk)

# Building Information Modelling

## About the course

Put simply, Building Information Modelling (BIM) looks to ensure that better information is created, shared and kept secure so that the design, construction, occupation and maintenance of our built assets can be more efficiently managed.

The aim of this unit is to give students the background knowledge and understanding of Building Information Modelling in the context of the construction industry. Students will be introduced to the drivers and benefits associated with BIM, as well as the terminology that surrounds it.

## What you could do next

The knowledge and skills gained in this unit will allow students to understand the importance of BIM in the context of current roles and responsibilities in the construction industry. Students will also gain an understanding of how this may influence future choices in their professional careers.





## Key Points

Our new BIM suite is the perfect location to learn more about the subject, whilst developing both practical and theoretical knowledge.

# Digital Applications for Construction Information

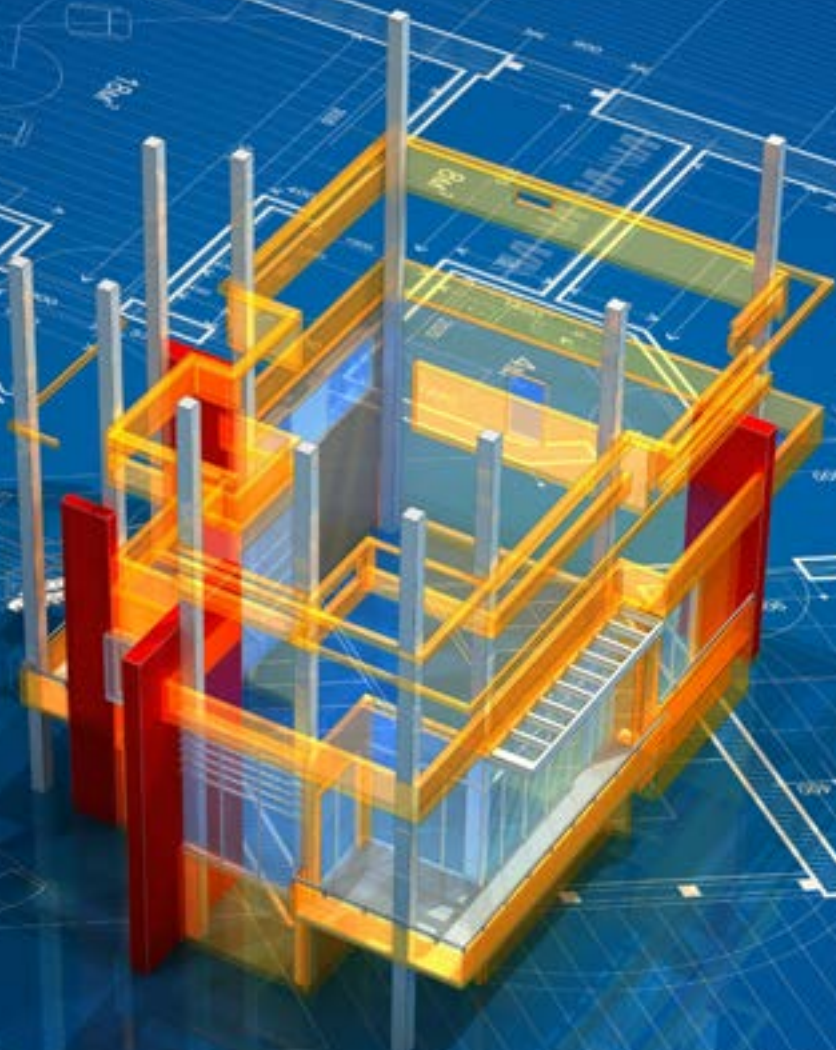
## About the course

Central to construction information is the production of construction drawings, most other forms of construction information will rely, to a greater or lesser degree, on reference to construction drawings. Therefore, the production of accurate and clearly defined construction drawings is a critical part of the overall construction information package. To achieve this, digital applications play a key role in the production of construction drawings. They provide a way to manage drawing information and make changes with greater efficiency and can be shared readily through a variety of digital communication systems.

## What you could do next

On successful completion of this unit, students will be able to discuss the key the range of digital applications utilised within the construction industry, and present construction information packages, including drawing, schedules, and specifications for a given project.





## Key Points

Our specialist staff are knowledgeable, experienced and enthusiastic about upskilling those involved in the construction sector.

# Principles of Alternative Energy

## About the course

Governments around the world have recognised the importance of tackling energy consumption in the built environment and have instituted legislation to address these issues. New technologies that harness solar, wind and hydro energy are now established systems for generating power and heat. Along with other innovations, such as heat pumps and biofuel, these sustainable energy systems are often incorporated into the design of new construction projects.

The aim of this unit is to develop students' knowledge of current and future energy technologies and to be able to apply that knowledge to the analysis and assessment of their effectiveness.

## What you could do next

On successful completion of this unit, students will be able to research and design alternative energy systems and assess new technologies available to the construction industry.





## Key Points

Our Low Carbon Technology Training Centre makes HLNSC the ideal organisation to provide courses focussed on the reduction of carbon emissions.



# Retrofit Award

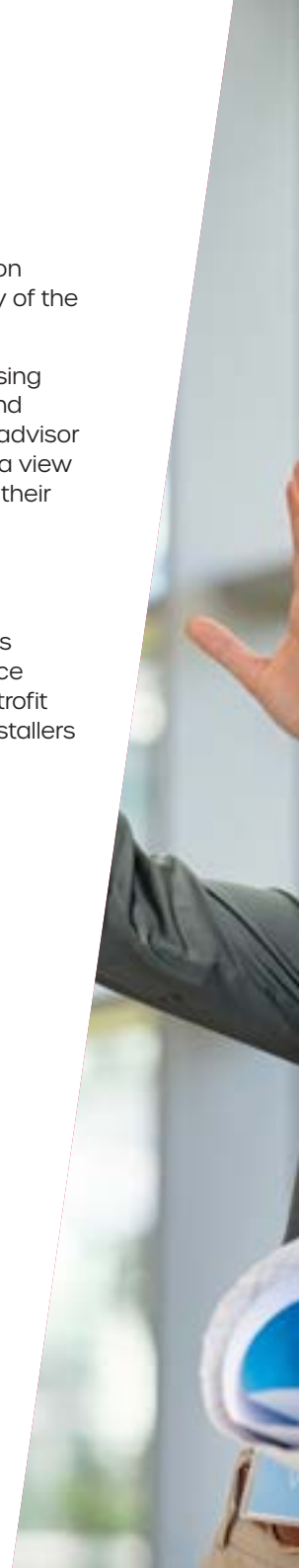
## About the course

Retrofit Advisors will play a key role as the UK reduces its carbon emissions by improving energy efficiency and retrofitting many of the country's 27 million homes.

Retrofit Advisors work in a range of organisations such as housing associations, local authorities, energy and utility companies and specialist retrofit companies. It is the responsibility of a retrofit advisor to give independent advice to homeowners or residents, with a view to help them understand retrofit and the impact it will have on their property.

## What you could do next

Retrofit Advisors are often the first point of contact for residents and have 2 key responsibilities: they provide support and advice throughout and administrative process support through the retrofit project, whilst also liaising with coordinators, designers, and installers to ensure everything is going to plan.





## Key Points

Our Low Carbon Technology Training Centre makes HLNSC the ideal organisation to provide courses focussed on the reduction of carbon emissions.

# Domestic Heating & Plumbing (Environmental) Apprenticeship

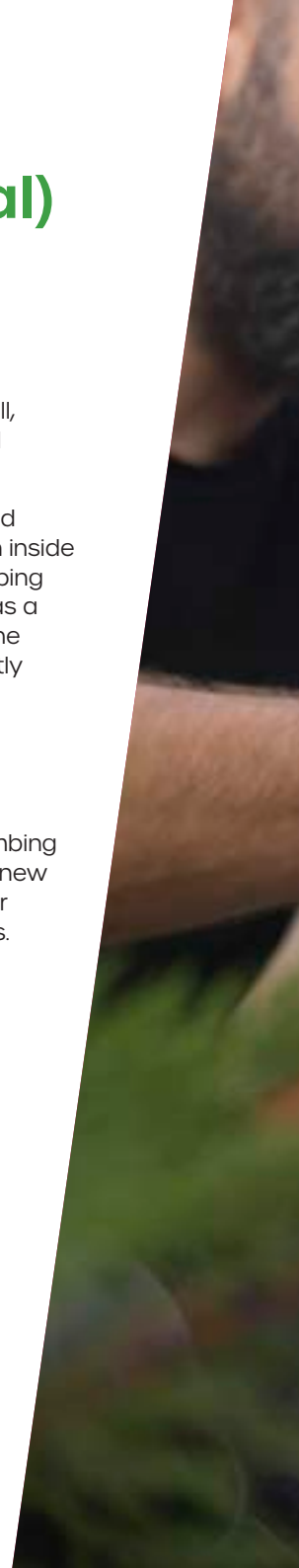
## About the course

Plumbing and Domestic Heating Technicians plan, select, install, service, commission and maintain all aspects of plumbing and heating systems.

Due to the nature of the industry, it is common for plumbing and domestic heating technicians to find themselves working both inside and outside of properties. Associated work also requires plumbing and heating technicians to be able to work independently or as a team and use their knowledge and skills to ensure that both the system and appliances are appropriately selected and correctly installed, often without any supervision, and done so in a safe, efficient and economical manner to minimise waste.

## What you could do next

The environmental pathway within this course puts future plumbing and domestic heating technicians at the forefront of installing new and exciting environmental technologies like heat pumps, solar thermal systems, biomass boilers and water recycling systems.





## Key Points

Our Low Carbon Technology Training Centre makes HLNSC the ideal organisation to provide courses focussed on the reduction of carbon emissions.

# Environmental Technologies

## About the course

This qualification is aimed at individuals who require, or wish to develop, a basic knowledge and understanding of fundamental working principles, potential to install, and regulatory requirements for micro-renewable and water conservation technologies.

## What you could do next

With a specific focus on solar thermal systems, heat pumps, biomass, solar photovoltaic systems, and water conservation, this award is designed to prepare eligible learners to progress to the specialist knowledge and competence for the installation, commissioning, handover, inspection, service and maintenance of micro-renewable energy and water conservation technologies.



## Key Points

Our Low Carbon Technology Training Centre makes HLNSC the ideal organisation to provide courses focussed on the reduction of carbon emissions.

# Electrical Machines

## About this course

Electrical machines can be found in manufacturing, transport, consumer appliances and hospitals. People will come across them every day in their home and at work. They convert energy in three ways: transformers which change the voltage level of an alternating current; motors which convert electrical energy to mechanical energy; and generators which convert mechanical energy to electrical energy. Transducers and actuators are also energy converters and can be found in a wide range of industrial and domestic applications.

This unit introduces you to the characteristics and operational parameters of a range of electromagnetic powered machines that are used in a variety of applications. Among the topics included in this unit are:

- Principles underlying the operation and construction of transformers
- Induction motors
- Synchronous machines
- Electromagnetic transducers

Actuators, and generators; and operating characteristics of electrical machines such as voltage, current, speed of operation, power rating, electromagnetic interference (EMI) and efficiency.

## What you could do next

On successful completion of this unit, you will be able to identify the constructional features and applications of transformers; investigate the starting methods and applications of three-phase induction motors and synchronous machines; investigate the types of generator available in the industry and analyse the operating characteristics of electromagnetic transducers and actuators.



A close-up photograph of a copper coil, likely part of an electric motor or generator. The coil is made of many turns of bright copper wire, tightly wound together. It is housed within a white, textured ceramic or enamel stator. The stator has several slots or openings where the coils are placed. The lighting is bright, highlighting the metallic sheen of the copper and the matte finish of the white material.

## Key Points

Our state-of-the-art workshops and labs contain everything you need to gain an insight into modern engineering design, manufacture, automation, robotics, maintenance and electrical and electronic technologies. Our staff not only have the technical knowledge, but also have extensive experience within the engineering industries and a passion for sharing this with others.



# Fluid Mechanics

## About this course

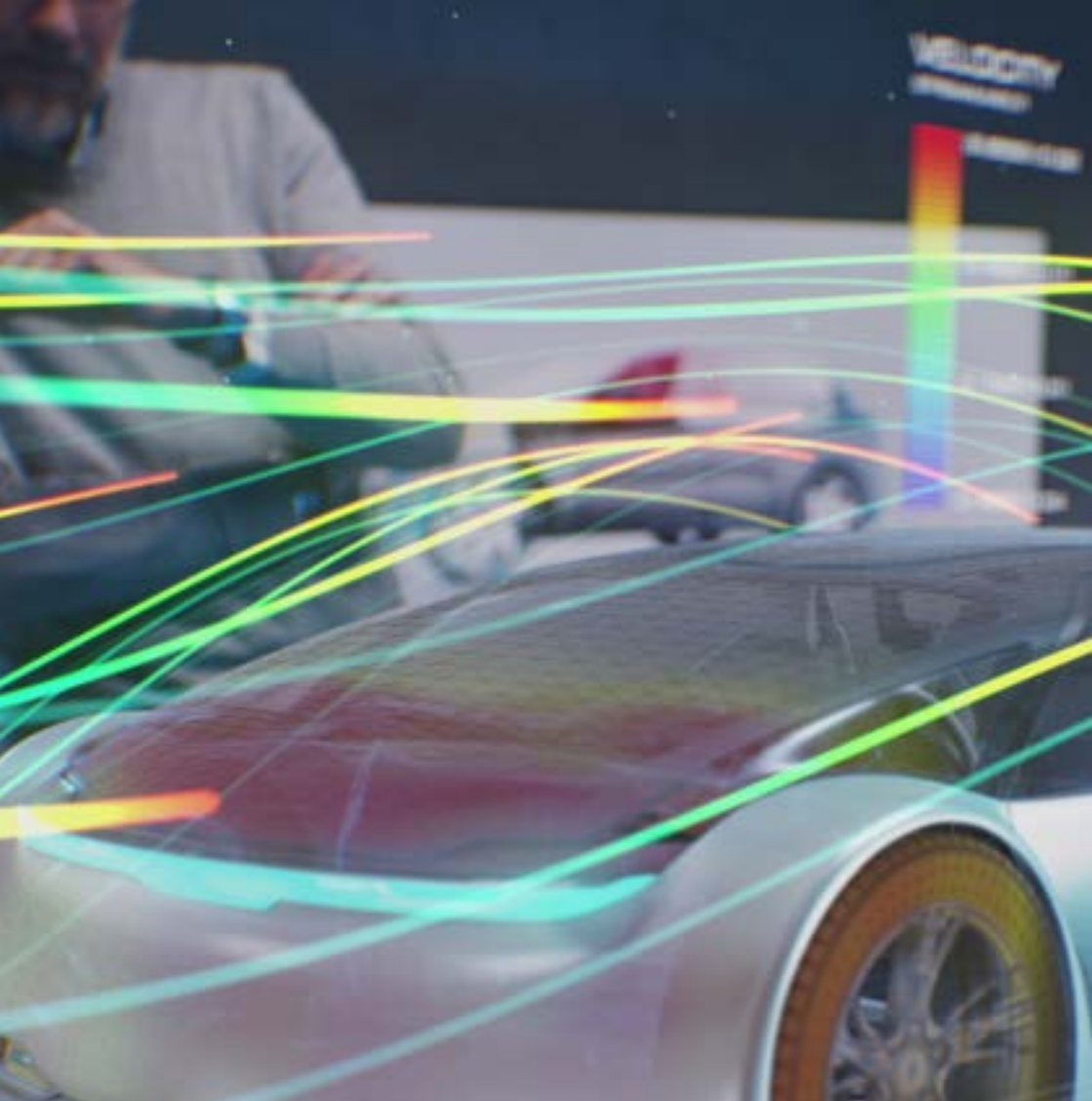
Fluid mechanics is an important subject to engineers of many disciplines, not just those working directly with fluid systems. Mechanical engineers need to understand the principles of hydraulic devices and turbines (wind and water); aeronautical engineers use these concepts to understand flight, while civil engineers concentrate on water supply, sewerage and irrigation.

This unit introduces you to the fluid mechanics techniques used in mechanical engineering. The hydraulic devices and systems that incorporate the transmission of hydraulic pressure and forces exerted by a static fluid on immersed surfaces. Topics included in this unit are:

- Pressure and force
- Submerged surfaces
- Fluid flow theory
- Aerodynamics
- Hydraulic machinery

## What you could do next

On successful completion of this unit, you will be able to work with the concept and measurement of viscosity in fluids, and the characteristics of Newtonian and non-Newtonian fluids; examine fluid flow phenomena, including energy conservation, estimation of head loss in pipes and viscous drag; and examine the operational characteristics of hydraulic machines, in particular the operating principles of various water turbines and pumps.



## Key Points

Our state-of-the-art workshops and labs contain everything you need to gain an insight into modern engineering design, manufacture, automation, robotics, maintenance and electrical and electronic technologies. Our staff not only have the technical knowledge, but also have extensive experience within the engineering industries and a passion for sharing this with others.

# Production Engineering for Manufacture

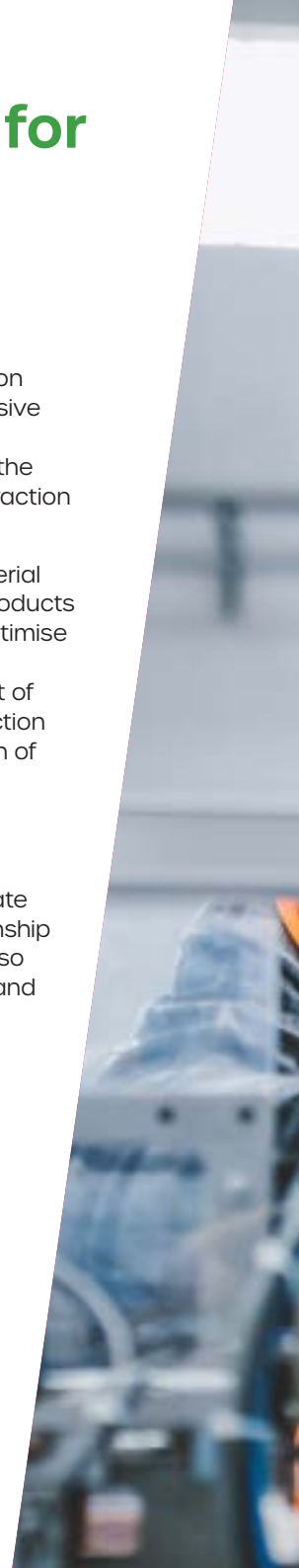
## About this course

All the manufactured products we use in our daily lives, from processed food to clothing and cars, are the result of production engineering. Production engineers need to have a comprehensive knowledge and understanding of all the possible production technologies available, their advantages and disadvantages, the requirements of the production system operation and the interaction between the various components of the production system.

This unit introduces you to the production process for key material types; the various types of machinery used to manufacture products and the different ways of organising production systems to optimise the production process; consideration of how to measure the effectiveness of a production system within the overall context of the manufacturing system; and an examination of how production engineering contributes to ensuring safe and reliable operation of manufacturing.

## What you could do next

On successful completion of this unit, you will be able to illustrate the role and purpose of production engineering and its relationship with the other elements of a manufacturing system. You will also be able to select the most appropriate production processes and associated facility arrangements for manufacturing products of different material types and design a production system incorporating a number of different production processes.





## Key Points

Our state-of-the-art workshops and labs contain everything you need to gain an insight into modern engineering design, manufacture, automation, robotics, maintenance and electrical and electronic technologies. Our staff not only have the technical knowledge, but also have extensive experience within the engineering industries and a passion for sharing this with others.

In-Comm Training, which is rated 'outstanding' by Ofsted, is one of the UK's leading independent training providers, supporting over 1000 apprentices and 500 companies every year with apprenticeships, upskilling opportunities, and strategic consultancy.

Operating from two world class technical academies in Aldridge and Telford, the company has pioneered an employer-led approach to skills, engaging with firms to understand their requirements and then collaborating with them on shaping course delivery, launching new training facilities and futureproofing staff for years to come.

The strategic technical partnerships are one of its unique strengths, closely followed by a £7m investment drive that has given learners access to state-of-the-art technology in CNC machining, CAD/CAM, 3D printing, fluid power, robotics, welding, metrology and tooling capabilities through the recent partnership with Brandauer.

In-Comm Training's home in Telford - at the heart of the traditional industrial revolution - was created in direct response to what employers in the area required and massive demand has seen it reach near capacity with learners and apprentices.








## Contact Details

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 InCommTraining

 Incomm\_training

# Introduction of a dedicated automation line – May 2024

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There has been a massive rise in the number of advanced manufacturing companies locating and expanding in the Marches, looking to take advantage of new opportunities in automotive, aerospace, electrification, and renewables.

With the rise in interest has come a need to upskill or reskill workers to meet demand, especially around robot programming and automation and this is where In-Comm Training will make a real difference to The Marches Education Partnership.

Tapping into funding from the Government's Local Skills Improvement Fund (LSIF), In-Comm Training is working with Telford-based Bauomat to design a dedicated 7-axis robotic automation line at its M54 Technical Academy.

Installation is underway and will be completed by May 2024, providing learners with access to a Kuka robot and a single servo powered head and tailstock positioner, along with a Kyrus guarding enclosure.

The latest addition to the Telford facility will help existing engineers upskill or reskill in a new engineering discipline, providing companies with a more agile workforce and one that is more prepared for the move to more automation and digital transformation.

This will be focused on three Level 3 courses in Industrial Robot Technology, Principles of Robotics, Programming of Robotics and a Level 4 course in Industrial Robotics.

Engineers will learn how to interact with PLCs, perform essential maintenance and automate production lines, whilst also touching on competence elements of fluid power, hydraulics, and pneumatics.





# Principles of Robots

Duration 3 days - non accredited

## About the course

- Know the hazards, health and safety requirements associated with robotic systems safety
- Understand the different types of robots used within the workplace
- Understand the manual operating principles of robots
- Understand basic robot programming

This Level 3, short non-accredited three-day course aims to give learners an insight into the world of robotics.

Popular modules:

- Robotic systems safety
- Types of industrial robot
- Manual operation
- Basic robot programming

## What you could do next

Level 3 or 4 accredited robotics course.





## Key Points

This course is an introduction to what robots are and then a small amount of programming to know the basics.

# Programming of Robots

Duration 4 days - non accredited

## About the course

- Know the hazards, health and safety requirements associated with robotic systems safety
- Understand the different types of robots used within the workplace
- Understand the manual operating principles of robots
- Understand robot programming

This Level 3, short non-accredited four-day course allow learners to develop robotic programmes specific to engineering tasks.

Popular modules:

- Robotic systems safety
- Types of industrial robot
- Manual operation (jogging)
- Intermediate robot programming
- Coordinate systems
- Tool systems

## What you could do next

Level 3 or 4 accredited robotics course.



## Key Points

This course is an introduction to what robots are, setting up and the programming of robots.

# Industrial Robot Technology

Duration 10 days - EAL accredited unit

## About the course

- Know the hazards, health and safety and maintenance requirements associated with industrial robots and robot work cells
- Understand the operating, design and control principles of modern industrial robots and typical robot work cells
- Understand the operating principles of industrial robot sensors and end effectors
- Be able to produce a working programme for an industrial robot or robot work cells

This Level 3 ten-day course aims to develop learners' understanding of the operation and control of industrial robots, which will give them the knowledge and skills needed to work safely when producing programmes for robots or robot work cells.

Popular modules:

- Hazards and health, safety and maintenance requirements associated with industrial robots and robot work cells
- Operating, design and control principles of modern industrial robots and typical robot work cells
- Operating principles of industrial robot sensors and end effectors

## What you could do next

Level 4 HNC robotics.







## Key Points

A 10 day course covering programming and theory behind robots, mixing theoretical assessments and report writing with practical programme writing.



# Industrial Robotics

Duration 10 days - HNC accredited course

## About the course

- A greater understanding of the electrical, mechanical, hydraulic and pneumatic operation of common industrial robots
- Know how to select and programme an industrial robot for given requirements
- Be able to consider safety considerations
- Be able to assess the economic future of robot technologies in manufacturing

This Level 4, ten-day course encourages learners to investigate the range, operation and benefits of industrial robots within manufacturing applications.

Among the topics included are industrial robot selection and programming and safety protocols that anticipate future developments in industrial robot technology.

Pearson accredits this programme as part of their Level 4 suite of Higher National Unit qualifications.

Popular modules:

- Introduction to and a history of robotics
- Types of robots
- Robotic applications
- Benefits of automation
- Robotic foundations: axes, kinematics, co-ordinates, frames & arm configuration
- Safety & cell design; aspects, hardware and offline programming
- Operator supervision
- Interfacing with PLC and use of HMI
- I/O overview
- Home/Ref positioning



- Use of registers
- Pendant layout & safety

## What you could do next

Developing your knowledge further with a full HNC course.



### Key Points

A 10 day course covering programming and theory behind robots, mixing theoretical assessments and report writing with practical programme writing.



Shropshire's longest established private training provider, SBC Training has been delivering high quality vocational training programmes and apprenticeships across the county for 40 years. Thousands of individuals have been supported into permanent employment and in their journey towards the achievement of their career goals.

SBC Training is a provider of general engineering training and apprenticeships and is rated by employers as one of the top apprenticeship providers in Shropshire. Group sizes are kept to a level where individual's learning needs are fully supported and wherever possible programmes are customised to ensure that specific employer needs are met.

#### **WHAT DO WE DO?**

SBC Training is an experienced provider of training to a wide range of business sectors contained within The Marches area. A wide range of Apprenticeship standards and stand-alone courses are facilitated from our training centres in Shrewsbury and Oswestry.





## Contact Details

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# Robot Process and Functions

## About the course

Are you interested in introducing automation into your welding production processes? If so, this course provides an ideal introduction into the use of robots in welding and fabrication environments that may help you to make decisions for organisational improvements.

- Understand industrial robot processes and functions
- Operate an industrial robot

Delivered over 3 x 3 hour sessions (day/evenings). This unit enables learners to understand industrial robot processes and functions and how to operate a robot.

## What you could do next

A wide range of courses at Level 3 and above for those interested in developing their knowledge of robotics and automated processes.





## Key Points

Learn in a small class setting and with a pragmatic approach to training delivery, we aim to help your business to grow.



# SHREWSBURY COLLEGES GROUP

Shrewsbury Colleges Group is Shropshire's largest provider of post-16 education. The college operates from three campuses, offering academic and vocational excellence, as well as Higher Education and Apprenticeship provision.

We have links and partnerships with over 600 local, regional, and national companies, providing opportunities for work experience, industry placements, apprenticeships, and employment. We continuously review our courses against local Labour Market Intelligence to ensure they meet the needs of the local economy with appropriate content for the current employment market.

## WHAT DO WE DO?

We offer high-quality teaching along with tutorial support to guide you through the courses that we offer. With excellent facilities and resources, we provide an environment which supports your studies to get the outcome that you want.

At the core of our success is our commitment to you, as an individual. We want you to enjoy your time with us and achieve your potential.





## Contact Details

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[scg.ac.uk/employers](http://scg.ac.uk/employers)

# Assembling, Wiring and Testing Electrical Panels/ Components Mounted in Enclosures

## About the course

This aim of this 10 day, non-accredited course is to develop the understanding and skills needed to assemble, wire and test electrical panels/components mounted in enclosures.

## What you could do next

There are various level 3 and level 4 options available to engineers wishing to further develop their skills and knowledge, including fully funded modules taken from the HNC (HTQ) in Electronic Systems including:

- Programming for Engineers
- Programmable Logic Controllers

Further opportunities are available by enrolling on additional modules or enrolling on the full higher level qualification.





## Key Points

With dedicated training facilities, we are proud to partner with leading producers of electrical panels in both the UK and Europe.

# Assembling and Testing Electronic Circuits

## About the course

The aim of this 5 day, non-accredited course is to develop the understanding and skills needed to assemble and test electronic circuits. This course is flexible and with additional learning outcomes can be extended to 10 days.

## What you could do next

There are various level 3 and level 4 options available to engineers wishing to further develop their skills and knowledge, including fully funded modules taken from the HNC in Electronic Systems including:

- Programming for Engineers
- Programmable Logic Controllers

Further opportunities are available by enrolling on additional modules or enrolling on the full higher level qualification.







## Key Points

With industry specialists managing these programmes, you can be assured of the highest quality teaching in training suites equipped with modern equipment and tailored facilities.



# Wiring and Testing Electrical Equipment and Circuit

## About the course

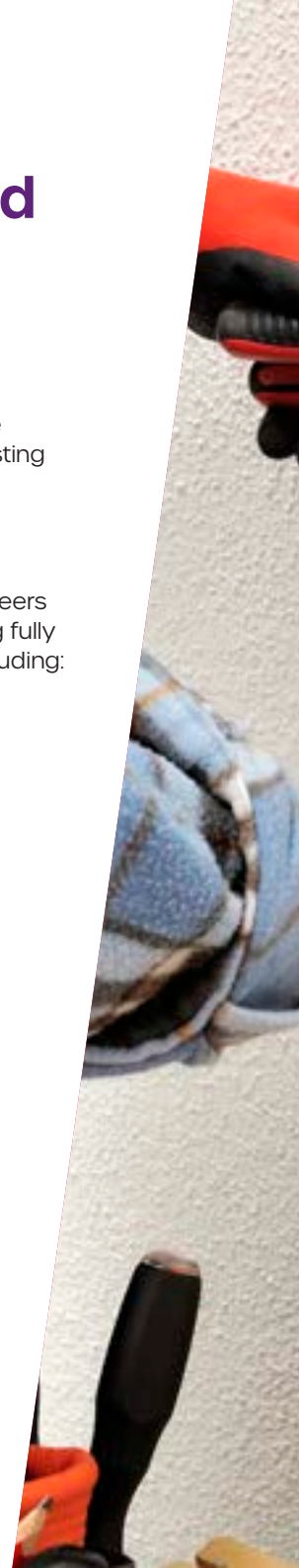
The aim of this 10 day, non-accredited course is to develop the skills and knowledge needed to apply electrical wiring and testing procedures and techniques safely.

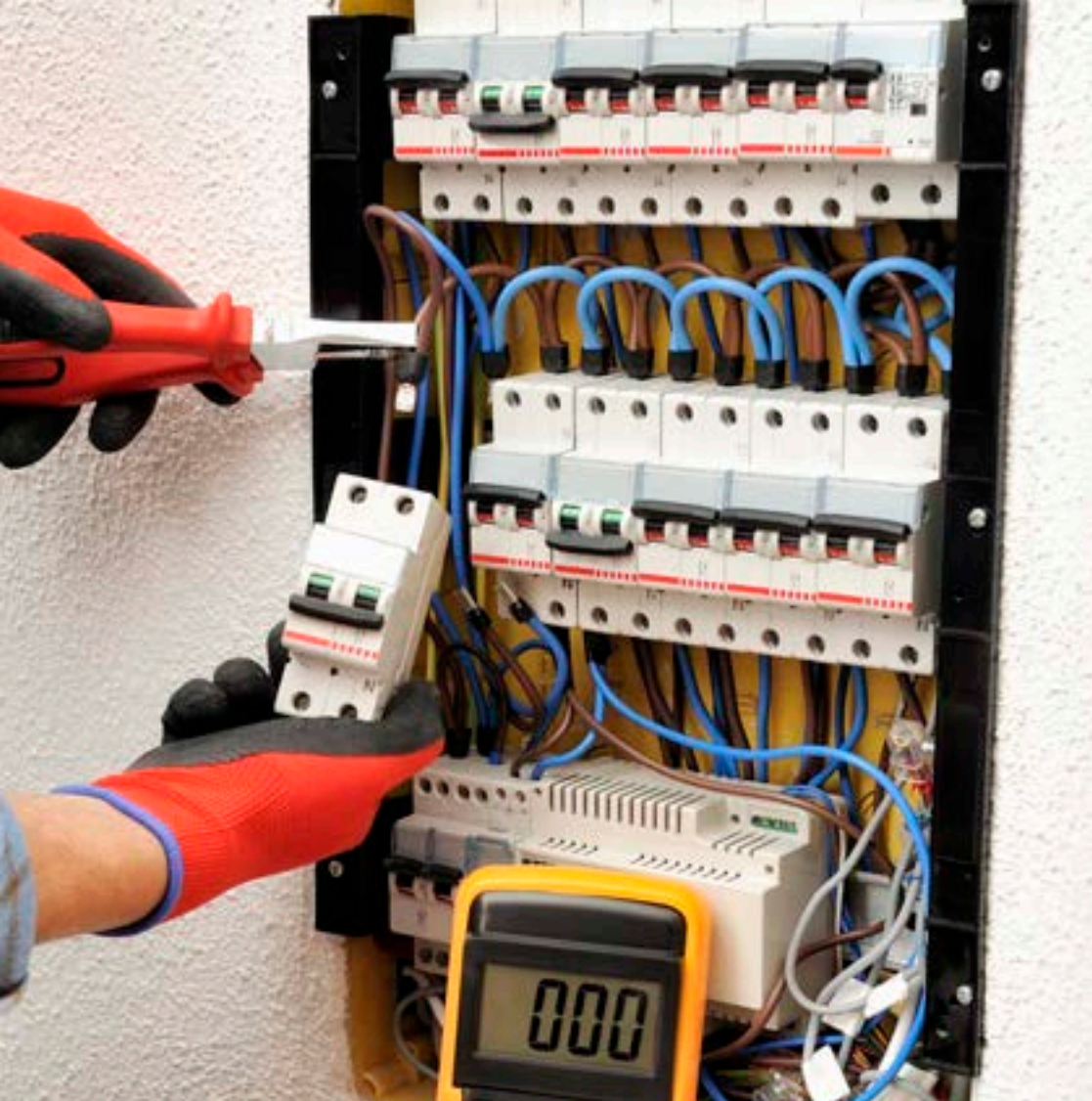
## What you could do next

There are various level 3 and level 4 options available to engineers wishing to further develop their skills and knowledge, including fully funded modules taken from the HNC in Electronic Systems including:

- Programming for Engineers
- Programmable Logic Controllers

Further opportunities are available by enrolling on additional modules or enrolling on the full higher level qualification.





## Key Points

With industry specialists managing these programmes, you can be assured of the highest quality teaching in training suites equipped with modern equipment and tailored facilities.

# Advanced Welding Skills

## About the course

This 30 week, accredited course is ideal for those wishing to take their welding skills to the next level. Welding processes available include Metal Inert Gas (MIG), Tungsten Inert Gas (TIG), or Manual Metal Arc. Learners will be required to produce high precision test pieces and be able to assess the quality of their welding via destructive testing techniques.

## What you could do next

Level 4 Advanced Methodologies or for those who aspire to, or are already in a supervisory role, we offer fully funded modules in Leadership and Management with units taken from this HNC including:

- Organisational Behaviour Management
- Managing and Leading Change

Further opportunities are available by enrolling on additional modules or enrolling on the full higher level qualification.





## Key Points

With a recently upgraded Advanced Fabrication and Welding Zone, the very latest technology is provided including training on lazer cutters, CNC press breaks and robotic welding.



# Automation, Robotics and Programmable Logic Controllers (PLCs)

## About the course

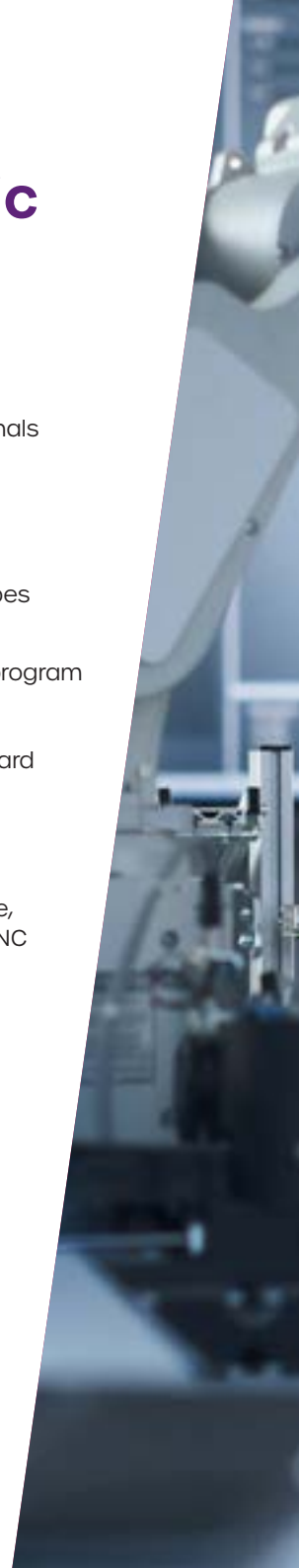
The aim of this unit, taken from the Pearson BTEC Higher Nationals Engineering Suite, is to investigate how Programmable Logic Controllers (PLCs) and industrial robots can be programmed to successfully implement automated engineering solutions.

Among the topics included are PLC system operational characteristics, different types of programming languages, types of robots and cell safety features.

On successful completion of this unit students will be able to program PLCs and robotic manipulators to achieve a set task, describe the types and uses of PLCs and robots available, write simple PLC programs, and program industrial robots with straightforward commands and safety factors.

## What you could do next

Engineers wishing to further develop their skills and knowledge, may choose additional fully funded modules taken from the HNC in Electronic Systems or enrol to the full higher technical qualification.





## Key Points

Opportunities to train on FANUC, Robots and Cobots in our specialist training environment.



# Electrical Systems and Fault Finding

## About the course

The aim of this unit, taken from the Pearson BTEC Higher Nationals Engineering Suite, introduces students to the characteristics and operational parameters of a range of electrical system components that are used in a variety of applications; and how to fault find when they go wrong.

On successful completion of this unit students will be able to follow electrical system circuit diagrams, understand the operation of the various components that make up the system and select the most suitable fault-finding technique. Therefore, students will develop skills such as critical thinking, analysis, reasoning, interpretation, decisionmaking, information and communication technology literacy, innovation, creativity, collaboration, and adaptability.

## What you could do next

Engineers wishing to further develop their skills and knowledge, may choose additional fully funded modules taken from the HNC in Electronic Systems or enrol to the full higher technical qualification.





## Key Points

Offering a dedicated Higher Education centre, facilities are separate from the main college, providing an adult environment for higher level learning.

# Monitoring and Fault Diagnosis of Engineering System

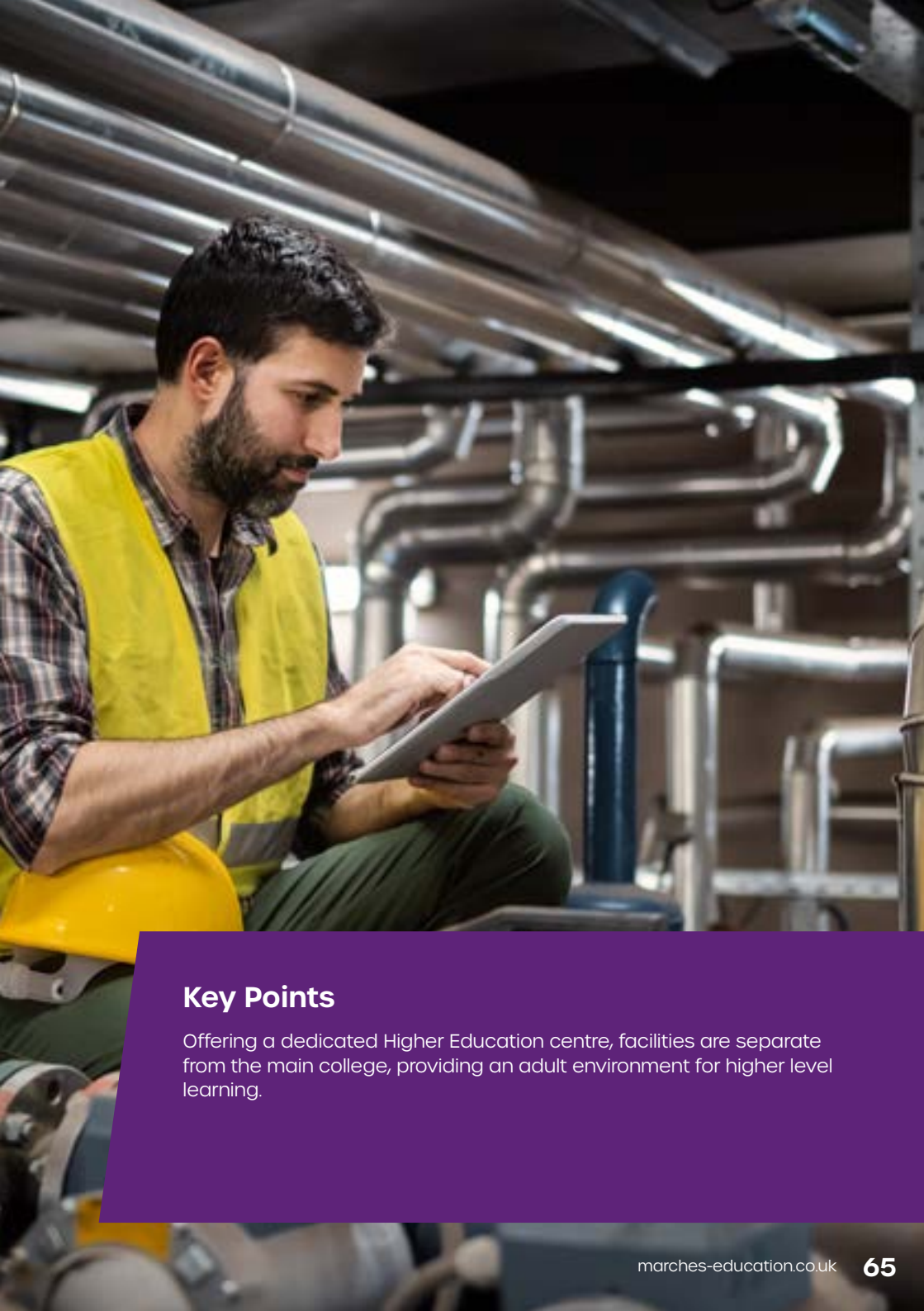
## About the course

The aim of this unit, taken from the Pearson BTEC Higher Nationals Engineering Suite, provides an understanding of condition monitoring equipment and the skills required to carry out systematic fault finding on engineering systems. Designed to develop the system being investigated, along with a variety of fault diagnosis and test techniques. In addition, learning how to use diagnostic aids to solve problems on the system under investigation is also included.

## What you could do next

Engineers wishing to further develop their skills and knowledge, may choose additional fully funded modules taken from the HNC in Electronic Systems or enrol to the full higher technical qualification.





## Key Points

Offering a dedicated Higher Education centre, facilities are separate from the main college, providing an adult environment for higher level learning.

# Upskilling in Offsite Construction

## About the course

This bespoke course aims to address the skills needed to create a multiskilled workforce. Working with each individual organisation, we design a programme of trade training to suit your specific production requirements, delivering practical workshops at your site on a rotational basis.

## What you could do next

Talk to us! We are here to listen to your business training needs and would be pleased to discuss further bespoke training to suit your processes, efficiencies and staff development.

For your managers, we offer fully funded modules in Construction Management and Modern Methods of Construction with units taken from these HNCs including:

- Legal and statutory requirements
- Site supervision and operations
- Principles of alternative energy
- Principles of offsite construction







## Key Points

With relevant, industry experienced staff, we ensure the design of our training is aligned to meet the specific needs of your organisation.



# NVQ in Insulation and Building Treatments

## About the course

This NVQ course is aimed at experienced insulation workers, working in the construction industry, offering the opportunity for sole traders and employees to validate their skills and experience.

Offering both internal wall insulation and external wall insulation of domestic buildings and commercial properties, the College deliver this NVQ through the Onsite Assessment and Training (OSAT) route.

## What you could do next

On completion of this NVQ, learners would be eligible to apply for the CSCS Gold Skilled Worker card.

For those who aspire to a supervisory role, we offer fully funded modules in Construction Management and Modern Methods of Construction with units taken from these HNCs including:

- Legal and statutory requirements
- Site supervision and operations
- Principles of alternative energy
- Principles of offsite construction



## Key Points

Our NVQ assessors come from your industry so speak your language. Focussing on the practical skills and capturing knowledge in a variety of ways, this assessment programme is tailored around you and your role.

# Construction Management Workshops

## About the course

With 11 workshops to choose from, this rolling course, delivered at Shrewsbury College, offer topics that cover a variety of scenarios facing the new or aspiring manager.

Choose from:

### One day workshops

- Developing yourself as a team leader
- Planning and monitoring work in construction
- Understanding, organising and delegating in construction
- Understanding the induction and onboarding of new staff in construction
- Understanding the recruitment and selection of new staff in construction
- Understanding training and coaching in construction

### Two day workshops

- Achieving performance through people
- Delivery of site operations and logistics
- Handling difficult situations
- Leadership and management practice in construction
- Solving problems and making decision
- Understanding commercial awareness

## What you could do next

Having attended some of these workshops, trainee managers and supervisors can continue to develop their skills and knowledge by signing up to our fully funded, more in-depth modules in Construction Management with units taken from the HNC:

- Legal and statutory requirements
- Site supervision and operations



## Key Points

SCG are a CITB Approved Training Organisation (ATO) offering a range of approved courses, including these management workshops. For those employers who are eligible, attendance attracts CITB grants.

Telford College is working in partnership with employers to deliver the skills they need to adapt, grow, and thrive.

The unique and ambitious alliance between industry and education is raising aspirations and supporting employers to develop the quality of workforce they require, providing a pathway to higher quality and better paid careers.

An Ofsted rated 'Good' college, it is a key partner in the Marches Institute of Technology (IoT) which is committed to delivering world-class technical education and professional skills development.

Telford College is also playing a pivotal role in Local Skills Improvement Plan (LSIP) research, gaining a greater understanding of skills and training requirements across the region.

For adult programmes leading to employment, Telford College has been ranked the highest and top performing college in the West Midlands Combined Authority area, based on achievement and retention.

The college's vocational and technical centre of excellence in Wellington will be supported by a new Digital & Maths Skills Hub in Telford's Station Quarter from autumn 2024.







## Contact Details

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[info@telfordcollege.ac.uk](mailto:info@telfordcollege.ac.uk)

[telfordcollege.ac.uk](http://telfordcollege.ac.uk)



# Key Dates and Information

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## A pathway to professional growth

Telford College is leading on the delivery of the 'Developing Manufacturing and Engineering Skills' element of the Marches Education Partnership.

The programmes have been tailored to address skills shortages in the manufacturing and engineering sectors and support greater automation - with a particular focus on fabrication, welding, and manufacturing engineering maintenance.

To help deliver the training, a £500,000 investment is being made in upgrading the already industry-standard engineering training facilities at the college's Wellington campus.

The facility already includes a Computer Aided Design (CAD) suite, plus welding bays, milling stations, robotics and computer numerical control machines. It is due to be completed by September 2024.

The new study programmes are a pathway to higher level professional skills development studies at Telford College, such as HND or HNC General Engineering, Engineering Manufacturing, and Engineering Maintenance.



# Electronics for Maintenance Technicians

## About the course

A maintenance technician is responsible for completing routine and emergency repairs to equipment, plant, machinery, and manufacturing systems.

These short courses are suitable for providing maintenance technicians with the skills and knowledge required to carry out basic fault diagnosis and repairs of printed circuit boards and other electronic components.

- An introduction to basic electronics
- Printed circuit board design and construction
- Fault diagnosis of electronics
- Printed circuit board repair

They can be booked as a block of four, or studied individually.

## What you could do next

- More upskilling and reskilling short courses at the college's Retrofit Skills Lab
- Higher-level HNC General Engineering, Level 4 - for those working in an engineering related field looking to boost their career prospects and increase their skills.



A close-up, shallow depth-of-field photograph of a blue printed circuit board (PCB). A grey cable is plugged into a port on the left side of the board. The background is filled with out-of-focus electronic components, including various chips and solder joints, creating a bokeh effect. The lighting is bright, highlighting the textures of the components.

## Key Points

Our tutors have years of experience in their specialist fields – they don't just teach about it, they've been there and done it themselves.

# Electrics for Maintenance Technicians

## About the course

A maintenance technician is responsible for completing routine and emergency repairs to equipment, plant, machinery, and manufacturing systems.

These short courses are suitable for providing mechanical maintenance technicians with the skills and knowledge required to better understand electrical components and systems found in modern manufacturing and production machinery.

- Electrical safety for maintenance technicians
- Electrical devices for maintenance technicians
- Electrical fault diagnosis for maintenance technicians
- Electrical component replacement for maintenance technicians

They can be booked as a block of four, or studied individually.

## What you could do next

- More upskilling and reskilling short courses at the college's Retrofit Skills Lab
- Higher-level HNC General Engineering, Level 4 - for those working in an engineering related field looking to boost their career prospects and increase their skills.





## Key Points

You will learn your trade on the latest industry-standard equipment, in a realistic workplace-style environment.



# Mechanics for Maintenance Technicians

## About the course

A maintenance technician is responsible for completing routine and emergency repairs to equipment, plant, machinery, and manufacturing systems.

These short courses are suitable for providing electrical maintenance technicians with the skills and knowledge required to better understand mechanical/fluid power components and systems found in modern manufacturing and production machinery.

- Hydraulic/pneumatic safety
- Mechanical devices
- Hydraulic/pneumatic fault diagnosis
- Hydraulic/pneumatic component replacement

They can be booked as a block of four, or studied individually.

## What you could do next

- More upskilling and reskilling short courses at the college's Retrofit Skills Lab
- Higher-level HNC General Engineering, Level 4 - for those working in an engineering related field looking to boost their career prospects and increase their skills.





## Key Points

Our Haybridge campus is also home to a new Retrofit Skills Lab, which has been kitted out with the latest battery storage units, solar power systems and electric car charging points.

# Automation for Maintenance Technicians

## About the course

A maintenance technician is responsible for completing routine and emergency repairs to equipment, plant, machinery, and manufacturing systems.

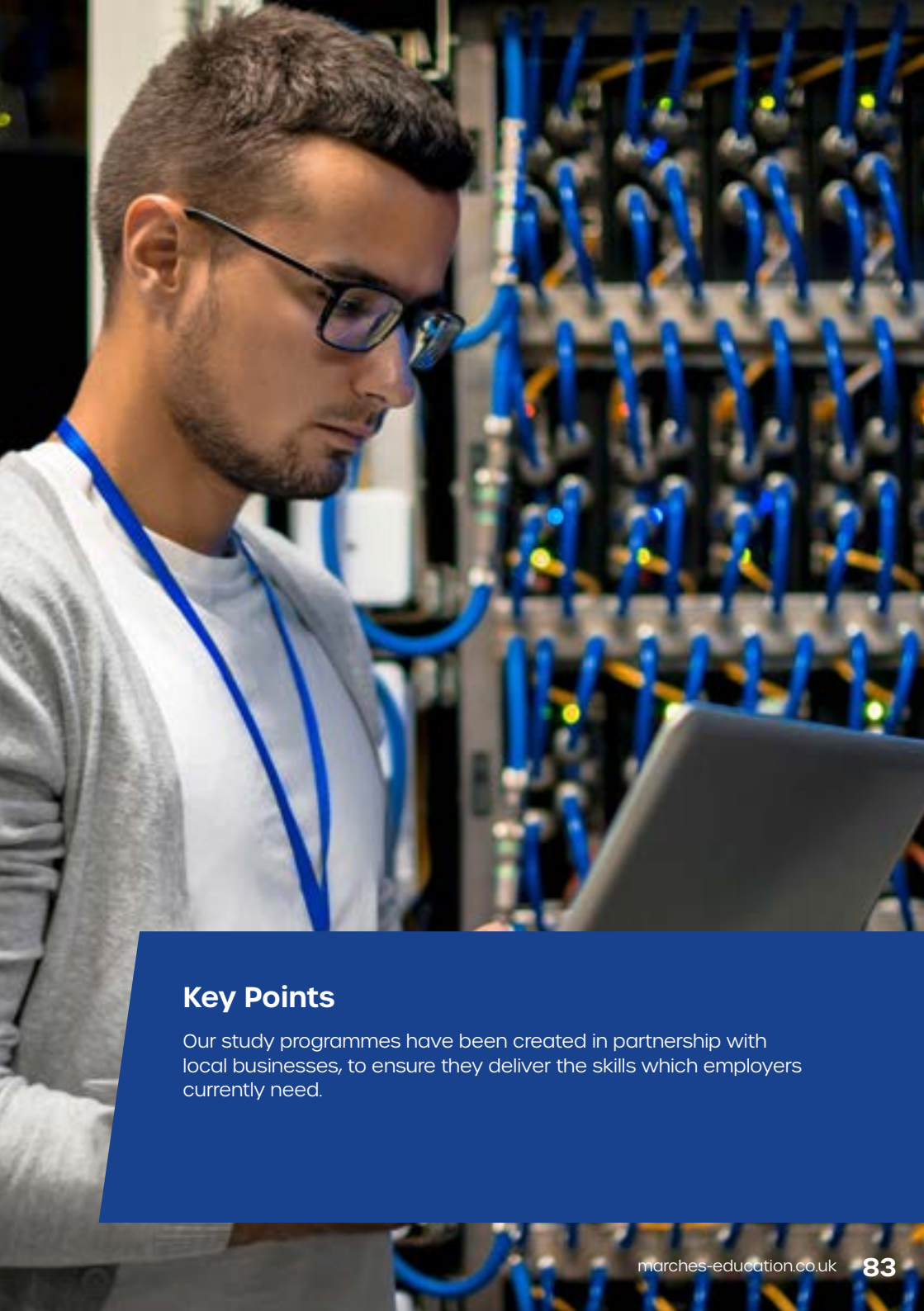
These short courses are suitable for providing maintenance technicians with the skills and knowledge required to understand modern automation PLC programmes and the use of HMI's to aid in maintenance activities.

- An introduction to Programmable Logic Controllers (PLCs)
- Intermediate PLCs for maintenance technician
- Fault diagnosis of PLC systems
- Cyber security

They can be booked as a block of four, or studied individually.

## What you could do next

- More upskilling and reskilling short courses at the college's Retrofit Skills Lab
- Higher-level HNC General Engineering, Level 4 - for those working in an engineering related field looking to boost their career prospects and increase their skills.



## Key Points

Our study programmes have been created in partnership with local businesses, to ensure they deliver the skills which employers currently need.

# Supervising in Construction

## About the course

Construction supervisors are responsible for overseeing and co-ordinating a wide variety of tasks on a construction project, including budgeting, scheduling, quality, safety, and compliance.

They also need to communicate effectively with stakeholders, such as clients, contractors, engineers, architects, and workers.

These targeted short courses are designed to be completed typically in just one day.

- Confirming work activities and resources for construction supervisors
- How to develop and maintain good working relationships for construction supervisors
- Confirming occupational method of work for construction supervisors
- Implementing and maintaining health, safety and welfare practices for construction supervisors
- Co-ordinating and organising work operations for construction supervisors
- Monitoring progress of work against schedules for construction supervisors

They can be booked as a block of six, or studied individually.

## What you could do next

- More upskilling and reskilling short courses at the college's Retrofit Skills Lab







## Key Points

As the largest further education centre in Telford & Wrekin and Shropshire, we are recognised as a major training hub for local and regional employers.

# Putting Employers at the Heart of the Skills Agenda

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**Marches Local Skills Improvement Plan (LSIP)** is a long-term Department of Education (DfE) England wide project, to put employers at the heart of the post 16+ skills agenda, now and in the future. Businesses spoke, we listened, and change has already happened, but this was only the start.

Shropshire Chamber of Commerce is the Employer Representative Body (ERB) leading the Improvement Plan project for the Marches, covering Shropshire, Herefordshire and Telford & Wrekin. Stage 1 ran September 2022 to July 2023. Its objective was to gather, interpret and share employer feedback with training providers on skills, training, recruitment, and retention. Feedback from any business, large or small, based in full or part in the Marches, but with a degree of natural focus on some of our biggest employment sectors. In August 2023, the Marches LSIP report was approved by the Secretary of State and published by the DfE. A report based on the direct feedback from 463 employers over 3 months, other widespread research, and stakeholder engagement. This report highlights need, but also both long and short-term changes that could bring positive change. This report enabled the successful Marches Education Partnership's £2.5 million Local Skills Improvement Fund (LSIF) bid to Government, approved October 2023, to fund these new training facilities and courses shown in this prospectus.

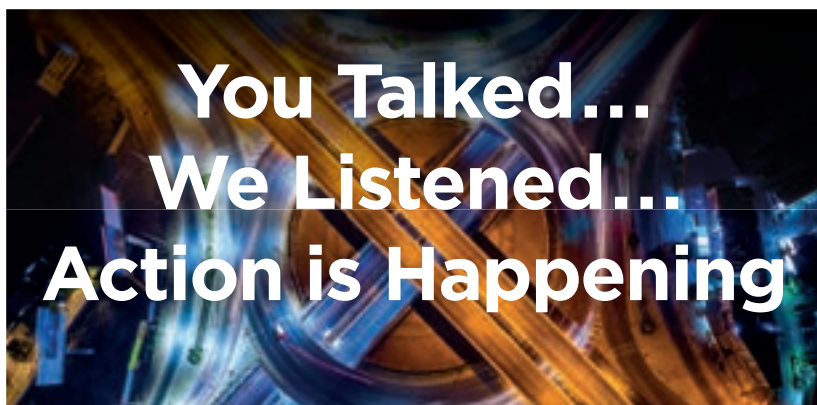
**Stage 2**, August 2023 - March 2025+, is all about embedding the LSIP process while continuing to harness the power of the Employer Voice. That voice is galvanising the local skills system long term and ensuring ongoing collaboration between employers, training providers, and local stakeholders to support the delivery of the actionable priorities set out in the Stage 1 Report. This will help to achieve better alignment of the local skills system with employers' needs, now and in the future, and to ensure employers are always at the heart of the skills agenda, as required by the Skills for Jobs white paper of 2021. Assisted by Herefordshire & Worcestershire Chamber to assure full coverage.

**Employers - We continue to require your voice** to ensure that we understand changing needs, patterns are mapped, and through that, provide Government, both national and local, with ongoing reliable facts for decisions and funding to be based upon. Want to learn more, please contact us.

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**P:** 01952 208225

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**If you employ in any of these sectors  
then we need your HELP**



**Engineering /  
Manufacturing**  
including **Food &  
Drink Production**



**Professional  
Services** including  
**Law, Finance,  
Media & IT**



**Construction**  
including  
**Environmental  
Technologies**



**Health &  
Social Care**

**Help us to understand your skills needs**  
**Contact us TODAY**

**Marches LSIPs**  
Local Skills Improvement Plan







2024/2025